

CSCWD 2013 Technical Program

June 27-29, 2013, Whistler Conference Centre, Whistler, BC, Canada

Wednesday June 26, 2013

17:00 – 20:00 Registration & Reception (Valley Foyer, Whistler Conference Centre)

Thursday June 27, 2013

07:30 - 17:30	Registration (Valley Foyer)		
08:30 - 09:00	Opening Plenary (Rainbow Theatre)		
09:00 – 10:00	Keynote Speech: Mengchu Zhou, Internet of Things: Recent Advances and Applications (Rainbow Theatre)		
10:00 – 10:20	Coffee/Tea Break (Valley Foyer)		
10:20 – 12:00	Session A1 (Rainbow Theatre)	Session B1 (Wedgemount A/B)	Session C1 (Spearhead A/B)
12:00 – 13:00	Lunch (Valley Foyer)		
13:00 – 15:00	Session A2 (Rainbow Theatre)	Session B2 (Wedgemount A/B)	Session C2 (Spearhead A/B)
15:00 – 15:20	Coffee/Tea Break (Valley Foyer)		
15:20 – 17:00	Session A3 (Rainbow Theatre)	Session B3 (Wedgemount A/B)	Session C3 (Spearhead A/B)
18:00 – 21:00	IEEE SMC CSCWD TC & CSCWD Steering Committee Meeting		

Friday June 28, 2013

08:30 - 09:30	Keynote Speech: Thomas Froese, Trends in Information and Communication Technologies for Construction: Past, Present and Future (Rainbow Theatre)		
09:30 – 10:00	Coffee/Tea Break (Valley Foyer)		
10:00 – 12:00	Session A4 (Rainbow Theatre)	Session B4 (Wedgemount A/B)	Session C4 (Spearhead A/B)
12:00 – 13:00	Lunch (Valley Foyer)		
13:00 – 15:00	Session A5 (Rainbow Theatre)	Session B5 (Wedgemount A/B)	Session C5 (Spearhead A/B)
15:00 – 15:20	Coffee/Tea Break (Valley Foyer)		
15:20 – 17:00	Session A6: (Rainbow Theatre)	Session B6 (Wedgemount A/B)	Session C6 (Spearhead A/B)
19:00 – 22:00	Conference Banquet (Valley Foyer)		

Saturday June 29, 2013

08:30 – 09:30	Keynote Speech: Kuo-Ming Chao, Sharing Summarised Semantic Data Rather Than Just Data (Rainbow Theatre)		
09:30 – 10:00	Coffee/Tea Break (Valley Foyer)		
10:00 – 11:40	Session A7: (Rainbow Theatre)	Session B7 (Wedgemount A/B)	Session C7 (Spearhead A/B)
11:40 – 12:00	Best Paper Awards and Closing Ceremony (Rainbow Theatre)		
12:00 – 13:00	Lunch (Valley Foyer)		

Whistler Conference Centre - Lower Level



<p>A1: Collaboration Methods and Techniques (1)</p> <p>10 Bo Yang, Qingke Zhang, Lin Wang and Yi Li. Inference of Differential Equations by M-MEP for Cement Hydration Modeling</p> <p>29 Liping Gao, Shuxian Guo, Yuben Zhang, Shanshan Wang, Qingkui Chen and Tun Lu. Solving Two Special Dependency Conflicts in Real-time Collaborative Design Systems</p> <p>30 Lucas Galete, Milton Ramos, Julio Nievola and Emerson Paraiso. Dynamically Modeling Users with MODUS-SD and Kohonen's Map</p> <p>42 Xiantao Cai, Fazhi He, Weidong Li, Xiaoxia Li and Yiqi Wu. Multi-Granularity Partial Encryption Method of CAD Model</p> <p>55 Hong Shen and Xiaoping Li. Cooperative Discrete Particle Swarms for Multi-mode Resource-constrained Projects</p>	<p>B1: Collaboration Technology Applications in Manufacturing</p> <p>12 Xia Zhu and Xiaoping Li. An Adaptive Intelligent Method for Manufacturing Process Optimization In Steelworks</p> <p>17 Xue Bai and Xiyu Liu. Design of E-commerce Development Roadmap for SMEs by DNA Computing Technique</p> <p>26 Shuo Zhang, Xiaodong Zhang, Yang Hu and Yingzi Li. Simulation Study on Collaborative Behaviors in Mass Collaborative Product Development</p> <p>40 Pingyu Jiang, Chaoyang Zhang, Lei Zhang, Weidong Li and Peihua Gu. Evaluating Part Machining Processes for Low-Carbon and Energy-Efficiency Contexts on Web</p> <p>43 Xiaoyu Wen, Xinyu Li, Liang Gao, Wenwen Wang and Liang Wan. Improved Genetic Algorithm with External Archive Maintenance for multi-Objective Integrated Process Planning and Scheduling</p>	<p>C1: Workshop on Internet of Things and Logistics (1)</p> <p>124 Yulian Cao, Wenfeng Li, Wei Song and W. Art Chaovalitwongse. Collaborative Material and Production Tracking in Toy Manufacturing</p> <p>127 Jiehan Zhou, Teemu Leppänen, Erkki Harjula, Mika Ylianttila, Timo Ojala, Chen Yu, Hai Jin and Laurence Tianruo Yang. CloudThings: a Common Architecture for Integrating the Internet of Things with Cloud Computing</p> <p>129 Jing Sun, Yinsheng Li and Kuo-Ming Chao. A RFID-based Tracing Service of Waste Electrical and Electronic Equipment</p> <p>132 Wei Wang, Bo Liu, Ming Yang, Junzhou Luo and Xiaojun Shen. Max-Cut Based Overlapping Channel Assignment for 802.11 Multi-Radio Wireless Mesh Networks</p> <p>144 Giancarlo Fortino, Raffaele Greco and Antonio Guerrieri. Modeling and Evaluation of the Building Management Framework based on the Castalia WSN Simulator</p>
<p>A2: Collaboration Methods and Techniques (2)</p> <p>62 Davide Vega, Roc Meseguer, Felix Freitag, Sergio Ochoa. Effort-Based Incentives for Resource Sharing in Collaborative Volunteer Applications</p> <p>107 Sergio Palma J. Medeiros, Jano Moreira de Souza, Vanessa Janni Epelbaum and Maria Gilda P. Esteves. Fuzzy Prospective Scenarios in Strategic Planning in Large-Group Decision</p> <p>108 Matthias Wenzel, Lutz Gericke, Raja Gumieny and Christoph Meinel. Towards Cross-Platform Collaboration - Transferring Real-Time Groupware to the Browser</p> <p>109 Edson Lucas, Daniel Schneider, Toacy Oliveira and Jano de Souza. A Survey of Languages to Represent Collaboration as a Means of Designing CSCW Facilities in RDL</p> <p>116 Alexandre P. Uchoa, Maria Gilda P. Esteves and Jano M. Souza. Mix4Crowds - Toward a Framework to Design Crowd Collaboration with Science</p> <p>137 Jonice Oliveira, Addressa Silva, Raphael Franckini. Collaborative Information Gathering and Recommendation Using Mobile Computing</p>	<p>B2: Collaboration Technology Applications in Manufacturing</p> <p>50 Sizhu Zhou and Lun Qin. Parametric Design of Turbodrill Bearing Section based on VB and Solidworks</p> <p>52 Xiaozhen Mi, Feng Wang, Libin Fu and Daliang Zheng. Study on the Collaborative Design System Based on Skeleton Model for High Speed Train Body</p> <p>68 Ning Liu and Xiaoping Li. A multilevel Modeling Framework for Semantic Representation of Cloud Manufacturing Resources</p> <p>74 Yang Yang, Xinyu Li and Liang Gao. Parameters Optimization of a Multi-pass Milling Process based on Imperialist Competitive Algorithm</p> <p>75 Yanbing Liu, Hongbo Sun, Tianyuan Xiao and Wenhui Fan. Constructing Federate Collaboration Ontology by UML Profiles</p> <p>76 Xiaohui Wang, Zhiwei Lin and Renwei Xia. SIMP based Topology Optimization of a Folding Wing with Mixed Design Variables</p>	<p>C2: Workshop on Internet of Things and Logistics (2)</p> <p>145 Xiuwen Fu, Wenfeng Li and Giancarlo Fortino. A Utility-Oriented Routing Algorithm for Community Based Opportunistic Networks</p> <p>80 Zhuo Zhou and Min Liu. A Data Processing Framework for IoT based Online Monitoring System</p> <p>32 Emil Jimenez and Ruizhong Wei. Indoor Localization of Ubiquitous Heterogeneous Devices</p> <p>99 Yulong Zou, Xainbin Wang and Weiming Shen. Eavesdropping Attack in Collaborative Wireless Networks: Security Protocols and Intercept Behavior</p> <p>49 Daniel Moreno, Sergio F. Ochoa, Rodrigo Santos and Roc Messeguer. Geo-Localized Messages Irradiation using Smartphones: An Energy Consumption Analysis</p>
<p>A3: Collaboration Methods and Techniques (3)</p> <p>138 Peng Zhang, Zhenhua Duan and Cong Tian. Simulation of CTCs-3 Protocol with Temporal Logic Programming</p> <p>140 Adam Grzywaczewski, Rahat Iqbal, Anne James and John Halloran. Supporting Information Exchange Among Software Developers Through The Development Of Collaborative Information Retrieval Utilities</p> <p>146 Mandeep Pannu, Anne James and Rachid Anane. Hybrid Profiling in Information Retrieval</p> <p>133 Zhongda Yuan, Yuchun Ma, Jinian Bian, and Kang Zhao. Automatic Enhanced CDFG Generation based on Runtime Instrumentation</p> <p>134 Guoqiang Liang, Yuchun Ma, Kang Zhao and Jinian Bian. Efficient Custom Instruction Generation Based on Characterizing of Basic Blocks</p>	<p>B3: Collaboration Technology Applications in Manufacturing (3)</p> <p>81 Qing Wu, Xinyu Li, Liang Gao and Ying Li. A Simplified Electromagnetism-like Mechanism Algorithm for Tool Path Planning in 5-Axis Flank Milling</p> <p>85 Zhuangcheng Liu, Shuai Ma, Yanjun Shi and Hongfei Teng. Solving Multi-objective Flexible Job Shop Scheduling with Transportation Constraints using a Micro Artificial Bee Colony Algorithm</p> <p>91 Sara Bouzid, Corine Cauvet, Claudia Frydman and Jacques Pinaton. A Semantic Support to Improve the Collaborative Control of Manufacturing Processes in Industries</p> <p>92 Stefan Silcher, Jan Königsberger, Peter Reimann and Bernhard Mitschang. Cooperative Service Registries for the Service-based Product Lifecycle Management Architecture</p> <p>111 Hongwei Wang, Hao Qin and Heming Zhang. Managing Engineering Analysis Knowledge</p>	<p>C3: Collaborative computing (Clouds, Grids, and Web Services)</p> <p>44 Lijuan Wang, Jun Shen, Changyan Di, Yan Li and Qingguo Zhou. Towards Minimizing Cost for Composite Data-Intensive Services</p> <p>53 Geng Sun, Jun Shen, Junzhou Luo and Jianmin Yong. Evaluations of Heuristic Algorithms for Teamwork-Enhanced Task Allocation in Mobile Cloud-Based Learning</p> <p>78 Raafat Omar Aburukba, Hamada Ghenniwa and Weiming Shen. Bidding Specification Language and Winner Determination for Grid Computing Scheduling</p> <p>130 Jinghui Zhang, Junzhou Luo and Fang Dong. Scheduling Parallel Task Graphs on Non-dedicated Heterogeneous Multicenter Platform with Moldable Task Duplication</p> <p>135 Ednilson Veloso Moura, Flávia Maria Santoro and Fernanda Araujo Baião. Collaborative Support for Knowledge-Intensive Processes through a Service-based Approach</p>
<p>A4: Agents and Multi-Agent Systems</p> <p>2 Hao Wang, Jian Cao and Xiaogang Wang. A Distributed Algorithm for Agent Coalition Formation with Complex Tasks</p> <p>4 Xiyu Liu, Jie Xue and Xiaolin Yu. A Muti-Agent Membrane Computing Technique for Conceptual Design</p> <p>48 Hong Liu. The Cooperative Reinforcement Learning in a Multi-Agent</p>	<p>B4: Collaboration Technology Applications in Manufacturing (4)</p> <p>20 Wangwei Chu, Yingguang Li, Wenping Mou, Changqing Liu and Limin Tang. A Reliability Prediction Method of Process Plan for Aircraft Structural Parts based on Fuzzy Comprehensive Evaluation</p> <p>143 Sudeep Ghimire, Ricardo Jardim-Goncalves, Antonio Grilo and Miguel Beca. Framework for Inter-operative e-Procurement</p>	<p>C4: Collaboration Technology Applications in Healthcare</p> <p>18 Ta-Ping Lu, Jui-Tien Shih, Cholada Kittipittayakorn and Geng-Feng Lian. Improving Outpatient Service Quality in Department of Orthopedic Surgery by Using Collaborative Approaches</p> <p>37 Amado Velazquez, Alejandro Hernandez, Sergio F. Ochoa. Design of Exergames with the Collaborative Participation of Older Adults</p>

<p>Design System</p> <p>67 Haibin Zhu and Luming Feng. An Efficient Approach to Group Role Assignment with Conflicting Agents</p> <p>122 Tiago Santos, Carlos Coutinho, Ricardo Goncalves and Adina Cretan. Negotiation Environment for Enterprise Interoperability Sustainability</p>	<p>Marketplace</p> <p>147 Xiaoxia Li, Weidong Li, Xiantao Cai and Fazhi He. A Honey-bee Mating Optimization Approach of Collaborative Process Planning and Scheduling for Sustainable Manufacturing</p> <p>149 Xingguang Fu, Marcel Langer and Dirk Söffker. Toward a Modeling of Human-centered, Rule-based Cooperative Teamwork</p>	<p>117 Carla Pereira, Maria Gilda P. Esteves, Sergio Medeiros, Jano Souza and Marcio Antelio. How the Crowd Can Change the Collaborative Work in Patient Care</p> <p>136 Hwa Gyoo Park. Research on Developing Clinical Collaborative Communication Systems</p> <p>56 Yingying Deng, Tun Lu, Huanhuan Xia, Dongsheng Li, Tiejang Liu, Xianghua Ding and Ning Gu. AOPUT: A Recommendation Framework Based on Social Activities and Content Interests</p>
<p>A5: Collaborative Workflows.</p> <p>6 Venlakaisa Hölttä, Petri Mannonen and Sampo Teräs. Design Communication Types in a Buyer-Supplier Relationship</p> <p>38 Yong Sun, Wenan Tan, Ler Li, Guangzhen Lu and Anqiong Tang. SLAs Detective Control Model for Workflow Composition of Cloud Services</p> <p>60 Xing Huang, Tun Lu, Xianghua Ding, Tiejang Liu and Ning Gu. A Provenance-based Solution for Software Selection in Scientific Software Sharing</p> <p>77 Chun Zhang, Huachao Mao, Gongzhuang Peng and Heming Zhang. A Novel BOM based Multi-Resolution Model for Federated Simulation</p> <p>100 Pedro Antunes, Valeria Herskovic, Sergio Ochoa and Jose A. Pino. Modeling Highly Collaborative Processes</p> <p>112 Joanne Manhães Netto, Juliana B. S. França, Flavia A. Santoro, Fernanda Araujo Baiao and Flavia M. Santoro. A Notation for Knowledge-Intensive Processes</p>	<p>B5: Ontology and Interoperability</p> <p>13 Amy J.C. Trappey, Charles V. Trappey, Hsin-Yi Peng and Tong-Mei Wang. Ontology-based Dental Implant Connection Patent Analysis</p> <p>15 Cesar A. Tacla, Eliane de Bortoli, Gustavo Giménez-Lugo, Jean M. Simão, Josiane Dall'Agnol and Emerson Paraiso. An Abstract Model for Identifying Potential Teams and Communities</p> <p>19 Laurent Wouters, Yuki Kaeri and Kenji Sugawara. Multi-Domain Multi-Lingual Collaborative Design</p> <p>47 Cheng Zheng, Weiming Shen and Hemada Ghenniwa. Design and Implementation of Intents User Agent</p> <p>69 Diego Arize, Rita Suzana P. Maciel and José Maria N. David. ThesIS: A Semantic Interoperability Service for a Middleware Service Oriented Architecture</p> <p>105 Josivan Pereira de Souza, Cesar Augusto Tacla, Franciele Beal, Emerson Paraiso and Gustavo A. Gimenez-Lugo. An Ontology-Based Agent for Context Aware Software Process Development</p>	<p>C5: Collaboration Technology Applications in Social Networks and Entertainment (1)</p> <p>7 Sandra Regina Rocha Silva and Geraldo B. Xexéo. Child Search Framework: A collaborative information retrieval architecture to assist children in the search process</p> <p>31 Xujuan Zhou, Xiaohui Tao and Jianming Yong. Sentiment Analysis on Tweets for Social Events</p> <p>64 Phil Thompson, Anne James and Antonios Nanos. V-ROOM: Virtual Meeting System Trial</p> <p>66 Iván Claros and Ruth Cobos. Social Media Learning: an Approach for Composition of Multimedia Interactive Object in a Collaborative Learning Environment</p> <p>79 Feng Zhang and Min Liu. Quantum Ant Colony Algorithm-Based Emergency Evacuation Path Choice</p>
<p>A6: Collaboration Platforms, Software Tools, and Services (1)</p> <p>61 Md. Anwar Hossain Masud and Xiaodi Huang. ESaaS: A New Software Paradigm for Supporting Higher Education in Cloud Environment</p> <p>22 Azam Beg, Amr Elchouemi and Raahim Beg. A Collaborative Platform for Facilitating Standard Cell Characterization</p> <p>33 Cheng Zheng, Weiming Shen and Hamada Ghenniwa. An Intents-based Approach for Service Discovery and Integration</p> <p>41 Nelson Baloian, Francisco Gutierrez and Gustavo Zurita. A Framework for Developing Distributed Collaborative Applications Using HTML5</p> <p>57 Tao Wu, Hui He, Xiqian Gu, Ying Peng, Yi Zhang, Yuntao Zhou and Senzhe Xu. An Intelligent Network User Behavior Analysis System Based on Collaborative Markov Model and Distributed Data Processing</p>	<p>B6. Coordination of Collaborative Supply Chains & Enterprise Networks</p> <p>110 Mansour Rached, Armand Baboli, Zied Bahroun and Jean-Pierre Campagne. Mathematical Model for Assignment Policies and Information Sharing in a Supply Chain</p> <p>24 Wafa Ghonaim, Hamada Ghenniwa and Weiming Shen. A GSP Double Auction for Smart Exchange</p> <p>3 Chen-Fang Tsai. An Optimizer of Grey-Genetic Algorithms to Improve the Prediction Efficiency for Taiwan Import and Export Pollution</p> <p>86 Hamza Ben Abdallah, Naoufel Cheikhrouhou, Zied Bahroun, Mansour Rached. A Bi-objective Model for Collaborative Planning in Dyadic Supply Chain</p> <p>11 Amy J.C. Trappey, Squall Chun-Yi Wu, Mike F.M. Yeh and Andy Y.F. Kuo. ISO14051-based Material Flow Cost Accounting System Framework for Collaborative Green Manufacturing</p>	<p>C6: Collaboration Technology Applications in Social Networks and Entertainment (2)</p> <p>88 Étienne Deparis, Marie-Helene Abel, Gaëlle Lortal and Juliette Mattioli. Designing a System to Capitalize Both Social and Documentary Resources</p> <p>96 Ho Leung Li, Vincent T. Y. Ng and Simon C. K. Shiu. Predicting Short Interval Tracking Polls with Online Social Media</p> <p>115 Carlos Gomes, Daniel Schneider, Jano de Souza, and Geraldo Xexéo. Cassino Musical: A Game with a Purpose for Social Recruitment and Measurement of Musical Talent</p> <p>139 Rahat Iqbal, Faiyaz Doctor, Margarida Romero and Anne James. Activity-Led Learning Approach and Group Performance Analysis Using Fuzzy Rule-Based Classification Model</p> <p>141 Abdulaziz Al-Raisi, Saad Amin, Rahat Iqbal and Anne James. Evaluation of E-Performance System: A Cultural Perspective</p>
<p>A7: Collaboration Platforms, Software Tools, and Services (2)</p> <p>73 Juliana do E. Santo Carvalho, Flavia Maria Santoro, Kate Revoredo and Vanessa Tavares Nunes. Learning Context to Adapt Business Processes</p> <p>97 Ramon R. Palacio, German Padilla, Alberto L. Morán, Joaquin Cortez and Aurora Vizcaino. Supporting Component Presence Notifications in Software Development</p> <p>120 Tom Nysetvold and Chia-Chi Teng. Collaboration Tools for Multi-User CAD</p> <p>148 Jiang-Liang Hou and Yong-Jhih Chen. Development and Application of Optimization Model for Customized Text Summarization</p> <p>101 David Suarez, Alvaro Monares, Sergio Ochoa, Jose A. Pino and Manuel Ibarra. Improving the Support to Decision Making in Medium-sized Urban Emergencies</p>	<p>B7: Collaboration Technology Applications in Architecture, Engineering, Construction.</p> <p>35 Faisal Syfar and Jing Gao. Mobile Collaboration Technology in Engineering Asset Maintenance: A Delphi Study</p> <p>90 Marianthi Leon and Richard Laing. Towards A Computer Mediated Methodology for Collaborative Design during the Early Architectural Design Stages</p> <p>123 Guangyuan Wang, Hua Wang, Xiaohui Tao and Ji Zhang. A Self-Stabilizing Protocol for Minimal Weighted Dominating Sets in Arbitrary Networks</p> <p>131 James Harty and Richard Laing. Facilitating Meaningful Collaboration in Architectural Design through the Adoption of BIM</p> <p>65 Ching-Lung Lin, Yuan-Chuen Hwang and Hsiu-Chen Lin. Study of the Efficiency Improvement in Power Generation from Photovoltaic</p>	<p>C7: Collaborative Virtual Environments</p> <p>71 Tatiana P. V. Alves, Marcos R.S. Borges and Adriana S. Vivacqua. An Environment to Support the Discovery of Potential Partners in a Research Group</p> <p>118 João Paulo Santos Da Silva, Daniel Schneider, Jano de Souza and Marcio Antelio Da Silva. A Role-Playing-Game Approach to Accomplishing Daily Tasks to Improve Health</p> <p>121 Kasumi Tarukawa, Tomoo Inoue and Kenichi Okada. Multi-view is Useful for More Accurate Understanding of Object in a Virtual Soccer Field</p> <p>142 Chih-Hsing Chu, Yu-Hsuan Chan. Optimized Distribution of Product Model by 3D CAD Streaming in Networked Collaborative Design</p> <p>151 Wei Zhang, Shaohua Teng, Xiufen Fu, Jihui Fan, Yi Teng, Haibin Zhu, A cooperative intrusion detection model based on granular computing</p>